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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/978,581 | 10/18/2001 | David M. Britz | 2000-0603A | 5222 |
| 22907 | 7590 | 12/02/2004 | EXAMINER | |
| BANNER & WITCOFF 1001 G STREET N W SUITE 1100 WASHINGTON, DC 20001 | | | TRAN, DZUNG D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2633 | |

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/978,581

Applicant(s)

BRITZ ET AL.

Examiner

Dzung D Tran

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 30-36 is/are rejected.
- 7) ☒ Claim(s) 2-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/18/01, 2/4/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

Drawings

1. Figure 1 should be labeled "Prior Art".

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 30-34 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Graves et al. US publication no. 2002/0191250.

Regarding claim 1, Graves discloses a communication network for a metropolitan area, the network comprising:

a primary metropolitan fiber ring (figures 3, 4);

a primary distribution/aggregation node (16) in primary metropolitan fiber ring;

and

a local service domain comprising a secondary aggregation node (14a, 14b) in communication with primary distribution/aggregation node (16).

Regarding claim 30, Graves discloses a redundant path (page 6, paragraph 0058, page 20, paragraph 0180) metropolitan ring back up and wherein a local service domain further comprises a plurality of tertiary aggregation nodes (12a, 12b, 12c, 12d).

Regarding claim 31, Graves discloses secondary aggregation node (14a, 14b) communicates with primary distribution/aggregation node (16) via fiber (15a, 15b).

Regarding claim 32, Graves discloses tertiary aggregation nodes (12a, 12b, 12c, 12d) on a perimeter of local service domain communicate with each other via a fiber (13a, 13b, 13c, 13d).

Regarding claims 33 and 34, Graves discloses tertiary aggregation nodes (12c, 12d) communicate with each other via free space optical communication (e.g. communication between mobile end-users 8 and fix wireless access end-users 9) (page 8, paragraph 0095).

Regarding claim 36, Graves discloses a communication network for a metropolitan area, the network comprising:

a primary distribution/aggregation node (16) (same as primary distribution/aggregation layer) that interface with a local customer primary distribution/aggregation node (14a, 14b) via transport branches of a mesh architecture (see figures 3,4);

a local distribution and routing layer (photonic switch 14) that routes specific wavelengths to and from customer's premises (page 13, paragraph 0120-0137); and

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a cross connect layer (figure 2, element 314, page 4, paragraph 0035) that handles customer specific wavelength and packet routing via fiber, wave radio and free space optical communication (page 8, paragraph 0095).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graves et al. US publication no. 2002/0191250.

As per claims above, Graves discloses all the limitations except for a secondary aggregation node (14a, 14b) communicate with a primary distribution/aggregation node (16) via free space optical communication. However, Graves discloses tertiary aggregation nodes (12c, 12d) communicate with each other via free space optical communication (e.g. communication between mobile end-users 8 and fix wireless access end-users 9) (page 8, paragraph 0095). Therefore, if it is not inherently it would have been obvious to a skill in the art that a secondary aggregation node (14a, 14b) can be communicated with a primary distribution/aggregation node (16) via free space

optical communication by using the same technique for communicating among the tertiary aggregation nodes (12c, 12d).

6. Claims 2-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Sala et al. U.S. publication no. 2003/0007212. System for spectrum allocation in Ethernet based fiber optic TDMA networks

b. Thompson et al. U.S. publication no. 2002/0073086. Scalable and programmable query distribution and collection in a network of queryable devices

c. Mattathil U.S. publication no. 2004/0109440. Optimized packet and time division multiplex transmission and network integration

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT
11/18/2004

H. Phan
Hanh Phan
Primary Examiner
11/24/04